

**Abstract 114**

**TITLE:** Communities at Risk – Estimating the Impact of the HIV Epidemic upon Adolescents and Adults at the Local Level

**AUTHOR:** Paul Denning (Centers for Disease Control and Prevention)

**BACKGROUND:** Since HIV-infected persons who develop AIDS by age 25 tend to have been recently infected, trends in AIDS incidence among these young persons will closely parallel trends in HIV incidence. AIDS incidence data for persons aged 18-25 years can thus provide a population-based means of estimating recent patterns of HIV infection among adolescents and young adults. Moreover, communities with the greatest need for HIV preventive interventions can be identified by examining these data at the local level.

**METHODS:** We analyzed AIDS surveillance and census data from all metropolitan statistical areas (MSAs) in the U. S. to calculate MSA-specific AIDS incidence rates for the 1-year periods July 1990-June 1991 and July 1995 - June 1996. Our analysis included persons aged 18-25 years who were exposed to HIV through male-male sex, injecting drug use, or heterosexual contact. We excluded MSAs with <10 AIDS cases in both evaluation periods. Data were adjusted for reporting delays, unreported HIV risks, and the 1993 change in the AIDS case definition.

**RESULTS:** For the 58 MSAs included in our analysis, the median AIDS incidence rate in 1995/96 was 9.8 cases per 100,000 persons aged 18-25 years (range=0.8-61.2). Some of the highest rates were in MSAs with populations <500,000, such as Fort Pierce, FL (61.2), Jackson, MS (21.3), and Columbia, SC (18.9). Rates in these small MSAs were substantially higher than in nearly all MSAs with populations  $\geq 1$  million, including Washington, DC (13.8), Los Angeles, CA (8.6), and Chicago, IL (7.7). Regionally, rates were greater than the median (9.8) in 77% (20/26) MSAs in the South, 50% (6/12) in the Northeast, 22% (2/9) in the Midwest, and 9% (1/11) in the West. Between 1990/91 and 1995/96, AIDS incidence rates for young persons increased by >25% in 16 (28%) of the 58 MSAs and decreased by >25% in 20 (34%). MSAs in which rates increased by > 25% were significantly more likely than MSAs with decreases >25% to have populations <1 million persons ( $p<0.01$ ), and significantly more likely to have young persons with AIDS who were female ( $p<0.01$ ) black ( $p<0.01$ ) or exposed to HIV through heterosexual contact ( $p<0.01$ ).

**CONCLUSIONS:** The high AIDS incidence rates in most of the MSAs analyzed reflect persistently high levels of HIV infection among adolescents and young adults. Of particular concern, trends in AIDS rates during the 1990s indicate that the HIV epidemic continues to spread, most notably in small MSAs and among women, blacks, and heterosexual contacts. To halt this continued growth in the epidemic, HIV prevention activities must be expanded in all communities-those currently affected, those becoming affected, and those not yet affected.

**PRESENTER CONTACT INFORMATION**

**Name:** Paul Denning

**Address:** Centers for Disease Control and Prevention  
1600 Clifton Road, NE, Mailstop E-47  
Atlanta, GA 30333

**Telephone:** (404) 639-2044

**Fax:** (404) 639-2980

**E-Mail:** pbd0@cdc.gov